Right hand

There is a big difference between a give of the fingers as the direction of the bow changes from up-bow to down, and active finger movements. Smooth, almost inaudible bow-changes come from 1) slowing the bow speed, and 2) lightening the bow, all in just the last half-centimeter before changing direction. The danger of actively flexing or straightening the fingers, rather than allowing them to remain springy and to act as 'shock absorbers', is that active movements may offer less control of the speed and weight rather than more.

These finger-movements are often seen as one of the hallmarks of the Carl Flesch bow arm. Flesch divided the movements of the right arm into six fundamental types, and the finger movement is No. 6:

- **1** Vertical movement of the upper arm
- 2 Horizontal movement of the upper arm
- 3 Opening and closing of the forearm at the elbow
- 4 Forearm rotation
- 5 Vertical movement of the hand at the wrist
- **6** Finger movement (flexing and straightening)

But years later Flesch said that he introduced the finger action into his teaching method only as a helpful exercise, and had 'never intended it to become a crucial point of bow technique. The finger stroke must only be used in minimal doses because if the change of bow is seen, it will also be heard!'

Imagine some of the violinists that went to Flesch for lessons. They were not all on the level of Ginette Neveu, Henryk Szeryng or Joseph Hassid, and certainly not when Flesch was as yet an unknown teacher. In his time he would have given lessons to amateurs, to beginners, to players with seemingly intractable technical problems.

You can easily imagine students coming to him with awkward, stiff bow holds, straight fingers, white knuckles and so on, and you can imagine Flesch experimenting to find ways to loosen them up. If a player has stiff fingers it makes sense to give them exercises like this one, which I was first shown by Yfrah Neaman – himself a pupil of Flesch:



The idea is to play very slowly, using only the fingers to make the stroke without using the arm or hand at all. Straighten the fingers to move the bow down, flex to move up. Practise at both the extreme heel and the extreme point and play f.

This is very good to be able to do, yet afterwards all you want is flexibility rather than these active movements. Of course, whenever an active finger-movement feels natural and desirable there can be no harm in allowing it, or deliberately making it. But in general the most helpful principle to follow is one that applies to many aspects of violin technique: If you can see it, it is too much; if you cannot see it, it is too little!

Vertical and 'horizontal' finger movement

While the vertical finger movement is straightforward and simple to describe, the horizontal movement of the fingers is not quite what it seems because in fact there is actually no such thing. The fingers are hardly able to move sideways, and the only time that they do so is when they are moved further apart or closer together in their placement on the bow. There is really only one action of the fingers, which is their straightening or bending; but when the fingers are placed on the bow the forearm rotates anticlockwise so that they the fingers lean towards the first finger – in other words so that they are diagonal to the bow rather than vertical – the same straightening and curving moves the bow horizontally along the string.

Exercise 1. Vertical

- Hold the bow two centimeters above the string at the nut, with rounded fingers and low knuckles. The hand will look similar to (Fig. 1).
- Place the bow on the string by straightening the fingers (as in Fig. 2), and then lift off back to the starting point by curving the fingers again.

• Keep the arm and hand still and use only the fingers to lower or raise the bow. Repeat the movement up and down several times.

Make sure that the thumb moves freely with the fingers: when the fingers straighten the thumb straightens, and when the fingers curve the thumb curves.

Exercise 2. Horizontal

- Play *forte*, but using only the fingers to move the bow. Keep the arm and hand as still as possible.
- Beginning with the fingers curved and the knuckles flatter (Fig. 2), straighten the fingers to move the bow down (Fig. 1) and flex to move up. Curve the fingers to move the bow up, straighten to move down. Fig. 3 shows the fingers curved, ready to straighten for a down bow. Fig. 4 shows the fingers straighter, ready to curve for an up bow.
- Use a mirror to see that the bow stays parallel to the bridge.
- Play at the heel, middle and point.



To make sure that only the fingers move, try it without the violin. Holding the bow as normal, make a few upand down-bow movements without the violin while holding the right hand with the left hand (Fig. 5). Place the thumb in the palm of the hand on top of the hand, and the first finger on the back of the hand underneath in the centre of the palm, to isolate the finger movement so that the hand itself remains still.

Exercise 3. Vertical and horizontal combined

Make small circles by combining the flexing movement of the fingers with a small amount of circular hand movement.

Use *as much* finger movement as possible, *as little* hand movement as possible, and *no* arm movement. Make a sound by touching the string at the bottom of the curve.

- 1 Start by holding the bow with curved fingers two centimeters or so above the string. The back of the hand and the fingers should be in a straight line.
- 2 Lower the bow to the string in a circular movement, straightening the fingers slightly. Play the note, and lift off back to the starting point by curving the fingers.
- 3 Do this clockwise and anticlockwise, in a continuous motion, at the heel, middle and point.

Bow angle

The fingers help to keep the bow parallel with the bridge. A common error is to try to correct crooked bow strokes by changing what the arm is doing, when the fault really lies with the fingers. This can result in awkward arm movements and tension.

- Hold the bow above the string at the heel. Move the point of the bow a little towards your left shoulder, and then towards your left hand, towards the bridge (Fig. 6), and away from the bridge (Fig. 7), using only the fingers.
- To move the point towards your left shoulder in towards the bridge, pull the first finger in and extend the fourth finger. To move the point out again, pull the little finger in and extend the first finger.
- Keep the heel of the bow above the string.
- Keep the arm and hand still. Place a coin on the back of the hand and make the movements without the coin falling off.

Afterwards play a few whole bows at different speeds and see how this movement of the fingers can help or hinder the ease of the bow and its angle to the bridge.